1. In a data processing system for connection in an open system network including a host device for generating commands during the processing of a host application including a command to copy data with arguments identifying a source logical device and a destination logical device, said method comprising the steps in sequence of:

A) establishing an operating environment by identifying, in response to arguments, the source and destination logical devices,

B) making the source and destination logical devices available for use by host applications, and

C) copying the data from the source logical device to the destination storage locations in an ordered manner including, for each storage location in the source logical device:

i) copying the data from each storage location in the identified source logical device to the identified destination logical device, and

ii) updating the information in the operating environment to indicate the completion of each transfer from a storage location in the source logical device.

2. A method as recited in claim 1 additionally comprising the step of deleting the operating environment after said copying has been completed for all the data in the source logical device.

3. A method as recited in claim 2 wherein during said copying a host application generates as one command a write request to transfer data from the host application to an identified storage location in the source logical device, said method including the steps of:

    i)   interrupting said ordered copying in response to the request,

    ii) copying data existing in the identified storage location in the source logical device to a corresponding storage location in the destination logical device,

    iii) re-enabling said ordered copying upon completion of said data copying, and

    iv) completing the data transfer to the identified storage location in the source logical device in response to the write request.

4. A method as recited in claim 2 wherein during said copying a host application generates as one command one of read and write requests to transfer data between the host application and an identified storage location in the destination logical device, said method including the steps of:

    i)   interrupting said ordered copying in response to the request,

    ii)   copying data to the identified storage location in the destination logical device from a corresponding storage location in the source logical device,

    iii) re-enabling said ordered copying upon completion of said data copying, and

    iv)   completing the transfer between the host application and the identified storage location in the destination logical device.

5. In a data processing system for connection in an open system network including a host device for generating commands during the processing of a host application including a command to copy the data from a source logical device comprising a plurality of contiguous data tracks on

a physical disk storage device to a block of contiguous data tracks in a destination logical device, said method comprising the steps in sequence of:

A) establishing an operating environment by identifying, in response to arguments in the command that identify the source and destination logical devices,

B) making the data in the source and destination logical devices available for use by host applications, and

C) copying the data from the source logical device to the destination logical device on an ordered, track-by-track basis including, and for each data track in the source logical device:

    i) copying the data in a data track in the source logical device to a corresponding data track in the destination logical device, and

    ii) updating the information in the operating environment to indicate the completion of each transfer from the source logical device.

6. A method as recited in claim 5 additionally comprising the step of deleting the operating environment after said copying has been completed for all the data tracks in the source logical device.

7. A method as recited in claim 6 wherein during said ordered copying a host application generates as another command a write request to transfer data to at least a portion of an identified data storage track in the source logical device, said method including the steps of:

    i) interrupting said ordered copying in response to the write request,

    ii) copying data existing in the identified data track in the source logical device to a corresponding track in the destination logical device,

    iii) re-enabling said ordered copying upon completion of said data copying, and

    iv) completing the transfer of data associated with the write request to the identified data track in the source logical device.

8. A method as recited in claim 6 wherein during said ordered copying a host application generates as one command one of read and write requests to transfer data between the host application and at least a portion of an identified track

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in the destination logical device, said method including the steps of:

i) interrupting said ordered copying in response to the request,

ii) copying data to the identified data track in the destination storage location from a corresponding data track in the source logical device,

iii) re-enabling said ordered copying upon completion of said data copying, and

iv) completing the transfer between the host application and the identified data track in the destination logical device.

9. A data storage facility that connects to a host device that generates commands during the processing of host applications wherein said data storage facility is adapted for copying data from a source logical device to a destination logical device in response to a predetermined command from a host application identifying said source and destination logical devices, said facility comprising:

A) means responsive to the predetermined command for establishing an operating environment by identifying said source and destination logical devices,

B) means for enabling interaction of other commands with said source and destination logical devices, and

C) means for copying the data from said source logical device to said destination logical device in an ordered manner, and

D) means responsive to said copying means for updating the operating environment to indicate data that has been transferred by said copying means.

10. A data storage facility as recited in claim 9 additionally comprising means for deleting the operating environment after said copying means has been completed copying all the data in said source logical device.

11. A data storage facility as recited in claim 10 wherein during the ordered copying a host application generates as another command a write request to transfer data from the host application to an identified storage location in said source logical device, said copying means including:

    i) a copy program,

    ii)   means for operating said copy program in the ordered copying mode,

   iii)   means for interrupting said ordered copying operating means in response to a write request and enabling said copy program to copy data from said identified storage location in said source logical device to a corresponding storage location in said destination logical device,

    iv)   means for re-enabling said ordered copying upon completion of said data copying, and

    v)   means for completing the data transfer to said identified storage location in said source logical device in response to the write request.

12. A data storage facility as recited in claim 10 wherein during said ordered copying a host application generates as one command one of read and write requests to transfer data between the host application and an identified location in said destination logical device, said ordered copying means including:

    i)   a copy program,

    ii)   means for operating said copy program in the ordered copying mode,

iii) means for interrupting said ordered copying operating means in response to any read and write request to a storage location in said destination logical device to enable said copy program to copy data from a corresponding storage location in said source logical device to the identified storage location in the destination logical device,

iv) means for re-enabling said ordered copying operating means upon completion of said data copying, and

v) means for completing the transfer between the host application and said identified storage location in said destination logical device.

13. A data storage facility for connection in an open system network including a host device that generates commands during the processing of host applications, which commands include a command for copying data with arguments identifying source and destination logical devices wherein each said logical device stores data in contiguous data tracks, said facility comprising:

A) means responsive to the copying command for establishing an operating environment in response to the command and the arguments that identify said source and destination logical devices,

B) means for enabling interaction of other commands with said source and destination logical devices, and

C) means for copying the data from said source logical device to said destination logical device in an ordered, track-by-track, manner, and

D) means responsive to said copying means for updating the operating environment to indicate the complete of each transfer of data in a data track.

14. A data storage facility as recited in claim 13 additionally comprising means for deleting the operating environment after said copying means has been completed copying all the data in said source logical device.

15. A data storage facility as recited in claim 14 wherein during said ordered copying a host application generates as one command a write request to transfer data from the host application to an identified data track in said source logical device, said copying means including:

      i)   a copy program,

      ii)   means for operating said copy program in the ordered, track-by-track manner,

      iii) means for interrupting said ordered copying operating means in response to the write request and enabling said copy program to copy data in said identified data track in said source logical device to a corresponding data track in said destination logical device,

      iv) means for re-enabling said ordered copying upon completion of said data copying, and

      v)   means for completing the transfer of data associated with the write request to said identified data track in said source logical device.

16. A data storage facility as recited in claim 14 wherein during said ordered copying a host application generates as another command one of read and write requests to transfer data between the host application and an identified data track in said destination logical device, said ordered copying means including:

      i)   a copy program,

ii)   means for operating said copy program in the
      ordered, track-by-track, manner,

iii) means for interrupting said ordered copying in
      response to one of the read and write requests
      to a data track in said destination logical
      device thereby to enable said copy program to
      copy the data in said corresponding data track
      of said source logical device to said identified
      data track in said destination logical device,

iv)   means for re-enabling said ordered copying upon
      completion of said data copying, and

v)   means for completing the transfer between the
      host application and said identified data track
      in said destination logical device, and

vi)   means for completing the transfer between the
      host application and the identified destination
      storage location.